

REFERENCE TITLE: elections; manual audit revisions

State of Arizona
Senate
Forty-eighth Legislature
Second Regular Session
2008

SB 1477

Introduced by
Senators Johnson: Gray L

AN ACT

AMENDING SECTIONS 16-449, 16-602 AND 16-663, ARIZONA REVISED STATUTES;
RELATING TO CONDUCT OF ELECTIONS.

(TEXT OF BILL BEGINS ON NEXT PAGE)

1 Be it enacted by the Legislature of the State of Arizona:

2 Section 1. Section 16-449, Arizona Revised Statutes, is amended to
3 read:

4 16-449. Required test of equipment and programs: notice:
5 procedures manual; list of equipment tested

6 A. Within the period of time before the election day prescribed by the
7 secretary of state in the instructions and procedures manual adopted pursuant
8 to section 16-452, the board of supervisors or other election officer in
9 charge, or for an election involving state or federal candidates, the
10 secretary of state, shall have the automatic tabulating equipment and
11 programs tested to ascertain that the equipment and programs will correctly
12 count the votes cast for all offices and on all measures **AND SHALL VERIFY**
13 **THAT ALL SOFTWARE AND FIRMWARE USED IN THE EQUIPMENT AND SYSTEM ARE VERSIONS**
14 **CERTIFIED FOR USE BY THE SECRETARY OF STATE.** Public notice of the time and
15 place of the test shall be given at least forty-eight hours prior thereto by
16 publication once in one or more daily or weekly newspapers published in the
17 town, city or village using such equipment, if a newspaper is published
18 therein, otherwise in a newspaper of general circulation therein. The test
19 shall be observed by at least two election inspectors, who shall not be of
20 the same political party, and shall be open to representatives of the
21 political parties, candidates, the press and the public. The test shall be
22 conducted by processing a preaudited group of ballots so punched or marked as
23 to record a predetermined number of valid votes for each candidate and on
24 each measure and shall include for each office one or more ballots which have
25 votes in excess of the number allowed by law in order to test the ability of
26 the automatic tabulating equipment and programs to reject such votes. **PARTY**
27 **REPRESENTATIVES MAY CONDUCT THEIR OWN TESTING USING BALLOTS MARKED BY THE**
28 **PARTY REPRESENTATIVES.** If any error is detected, the cause therefor shall be
29 ascertained and corrected and an errorless count shall be made before the
30 automatic tabulating equipment and programs are approved. A copy of a
31 revised program shall be filed with the secretary of state within forty-eight
32 hours after the revision is made. If the error was created by automatic
33 tabulating equipment malfunction, a report shall be filed with the secretary
34 of state within forty-eight hours after the correction is made, stating the
35 cause and the corrective action taken. The test shall be repeated
36 immediately before the start of the official count of the ballots in the same
37 manner as set forth above. After the completion of the count, the programs
38 used and the ballots shall be sealed, retained and disposed of as provided
39 for paper ballots.

40 B. Electronic ballot tabulating systems shall be tested for logic and
41 accuracy within seven days before their use for early balloting pursuant to
42 the instructions and procedures manual for electronic voting systems that is
43 adopted by the secretary of state as prescribed by section 16-452. The
44 instructions and procedures manual shall include procedures for the handling

1 of ballots, the electronic scanning of ballots and any other matters
2 necessary to ensure the maximum degree of correctness, impartiality and
3 uniformity in the administration of an electronic ballot tabulating system.

4 C. THE SECRETARY OF STATE OR OFFICER IN CHARGE OF ELECTIONS, AS
5 APPLICABLE, SHALL PRODUCE AND RETAIN AN AUDIT LOG AND DIRECTORY LISTINGS FOR
6 EQUIPMENT TESTED.

7 Sec. 2. Section 16-602, Arizona Revised Statutes, is amended to read:

8 16-602. Removal of ballots from ballot boxes; disposition of
9 ballots folded together or excessive ballots;
10 designated margin; hand counts; vote count
11 verification committee

12 A. The ballots cast in the election shall first be removed from the
13 ballot box and counted without being opened, except as may be necessary to
14 ascertain that the number of ballots cast corresponds with the number of
15 names on the poll lists.

16 B. If two or more ballots are found folded together appearing as a
17 single ballot, they shall be laid aside until the count of the ballots is
18 completed. If it then appears by comparison of the count with the number of
19 names on the poll lists that the ballots thus folded together were cast by
20 one elector, they shall be destroyed. If the ballots in the box are still
21 found to exceed in number the names on the poll lists, the ballots, except
22 those destroyed, shall be replaced in the box, and one of the judges, without
23 looking in the box, shall draw therefrom, one at a time, and destroy
24 unopened, a number of ballots equal to the excess, and the election board
25 shall record on the poll lists the number of ballots so destroyed and shall
26 then sign the poll list.

27 C. For each countywide primary, general and presidential preference
28 election, the county officer in charge of the election shall conduct a hand
29 count at the central counting center in the following order:

30 1. At least two per cent of the precincts in that county, or two
31 precincts, whichever is greater, shall be selected at random from a pool
32 consisting of every precinct in that county. The county political party
33 chairman for each political party that is entitled to continued
34 representation on the state ballot or the chairman's designee shall conduct
35 the selection of the precincts to be hand counted. The precincts shall be
36 selected by lot without the use of a computer, and the order of selection by
37 the county political party chairmen shall also be by lot. The selection of
38 the precincts shall not begin until all ballots voted in the precinct polling
39 places have been delivered to the central counting center. The unofficial
40 vote totals from all precincts shall be made public before selecting the
41 precincts to be hand counted. Only the ballots cast in the polling places
42 and ballots from direct recording electronic machines shall be included in
43 the hand counts conducted pursuant to this section. Provisional ballots,
44 conditional provisional ballots and write-in votes shall not be included in

1 the hand counts and the early ballots shall be grouped separately by the
2 officer in charge of elections for purposes of a separate manual audit
3 pursuant to subsection G of this section.

4 2. The races to be counted on the ballots from the precincts that were
5 selected pursuant to paragraph 1 of this subsection for each primary and
6 general election shall include up to five contested races. After the county
7 recorder or other officer in charge of elections separates the primary
8 ballots by political party, the races to be counted shall be determined by
9 selecting by lot without the use of a computer from those ballots as follows:

10 (a) For a general election, one statewide ballot measure, unless there
11 are no measures on the ballot.

12 (b) One contested statewide race for statewide office.

13 (c) One contested race for federal office, either United States senate
14 or United States house of representatives. If the United States house of
15 representatives race is selected, the names of the candidates may vary among
16 the sampled precincts.

17 (d) One contested race for state legislative office, either state
18 house of representatives or state senate. In either case, the names of the
19 candidates may vary among the sampled precincts.

20 (e) If there are fewer than four contested races resulting from the
21 selections made pursuant to subdivisions (a) through (d) and if there are
22 additional contested federal, statewide or legislative races or ballot
23 measures, additional contested races shall be selected by lot not using a
24 computer until four races have been selected or until no additional contested
25 federal, statewide or legislative races or ballot measures are available for
26 selection.

27 (f) If there are no contested races as prescribed by this paragraph, a
28 hand count shall not be conducted for that precinct for that election.

29 3. For the presidential preference election, select by lot two per
30 cent of the polling places designated and used pursuant to section 16-248 and
31 perform the hand count of those ballots.

32 4. For the purposes of this section, a write-in candidacy in a race
33 does not constitute a contested race.

34 5. In elections in which there are candidates for president, the
35 presidential race shall be added to the four categories of hand counted
36 races.

37 6. Each county chairman of a political party that is entitled to
38 continued representation on the state ballot or the chairman's designee shall
39 select by lot the individual races to be hand counted pursuant to this
40 section.

41 7. The county chairman of each political party shall designate and
42 provide the number of election board members as designated by the county
43 officer in charge of elections who shall perform the hand count under the
44 supervision of the county officer in charge of elections. For each precinct

1 that is to be audited, the county chairmen shall designate at least two board
2 workers who are registered members of any or no political party to assist
3 with the audit. Any qualified elector from this state may be a board worker
4 without regard to party designation. The county election officer shall
5 provide for compensation for those board workers, not to include travel, meal
6 or lodging expenses. If there are less than two persons for each audited
7 precinct available to participate on behalf of each recognized political
8 party, the recorder or officer in charge of elections, with the approval of
9 at least two county party chairpersons in the county in which the shortfall
10 occurs, shall substitute additional individual electors who are provided by
11 any political party from anywhere in the state without regard to party
12 designation to conduct the hand count. A county party chairman shall approve
13 only those substitute electors who are provided by the county chairman's
14 political party. The political parties shall provide to the recorder or
15 officer in charge of elections in writing the names of those persons
16 intending to participate in the hand count at the audited precincts not later
17 than 5:00 p.m. on the Tuesday preceding the election. If the total number of
18 board workers provided by all parties is less than four times the number of
19 precincts to be audited, the recorder or officer in charge of elections shall
20 notify the parties of the shortage by 9:00 a.m. on the Wednesday preceding
21 the election. The hand count shall not proceed unless the political parties
22 provide the recorder or officer in charge of elections, in writing, a
23 sufficient number of persons by 5:00 p.m. on the Thursday preceding the
24 election and a sufficient number of persons, ~~pursuant to section 16-602,~~
25 ~~subsection C,~~ THIS paragraph 7, arrive to perform the hand count. The
26 recorder or officer in charge of elections may prohibit persons from
27 participating in the hand count if they are taking actions to disrupt the
28 count or are unable to perform the duties as assigned. For the hand count to
29 proceed, no more than seventy-five per cent of the persons performing the
30 hand count shall be from the same political party.

31 8. If a political party is not represented by a designated chairperson
32 within a county, then the state chairperson for that political party, or a
33 person designated by the state chairperson, may perform the actions required
34 by the county chairperson as specified in this section.

35 D. If the randomly selected races result in a difference in any race
36 that is less than the designated margin when compared to the electronic
37 tabulation of those same ballots, the results of the electronic tabulation
38 constitute the official count for that race. If the randomly selected races
39 result in a difference in any race that is equal to or greater than the
40 designated margin when compared to the electronic tabulation of those same
41 ballots, a second hand count of those same ballots and races shall be
42 performed. If the second hand count results in a difference in any race that
43 is less than the designated margin when compared to the electronic tabulation
44 for those same ballots, the electronic tabulation constitutes the official

1 count for that race. If the second hand count results in a difference in any
2 race that is equal to or greater than the designated margin when compared to
3 the electronic tabulation for those same ballots, the hand count shall be
4 expanded to include a total of twice the original number of randomly selected
5 precincts. THE EXPANDED HAND COUNT SHALL INCLUDE THE BALLOTS FROM THE
6 ORIGINAL HAND COUNT TOGETHER WITH THE BALLOTS FROM THE ADDITIONAL PRECINCTS.
7 Those additional precincts shall be selected by lot without the use of a
8 computer.

9 E. In any expanded count of randomly selected precincts, if the
10 randomly selected precinct hand counts result in a difference in any race
11 that is equal to or greater than the designated margin when compared to the
12 electronic tabulation of those same ballots, the final hand count shall be
13 extended to include the entire jurisdiction for that race. If the
14 jurisdictional boundary for that race would include any portion of more than
15 one county, the final hand count shall not be extended into the precincts of
16 that race that are outside of the county that is conducting the expanded hand
17 count. If the expanded hand count results in a difference in that race that
18 is less than the designated margin when compared to the electronic tabulation
19 of those same ballots, the electronic tabulation constitutes the official
20 count for that race.

21 F. If a final hand count is performed for an entire jurisdiction for a
22 race, the final hand count shall be repeated for that race until a hand count
23 for that race for the entire jurisdiction results in a count that is
24 identical to one other hand count for that race for the entire jurisdiction
25 and that hand count constitutes the official count for that race.

26 G. After DURING the electronic tabulation of early ballots and at one
27 or more times selected by the chairman of the political parties entitled to
28 continued representation on the ballot or the chairman's designee, the
29 chairmen or the chairmen's designees shall randomly select one or more
30 batches of early ballots ~~that have been~~ TO BE tabulated to include at least
31 one batch from each machine used for tabulating early ballots and those
32 ballots shall be securely sequestered by the county recorder or officer in
33 charge of elections along with their unofficial tally reports for a
34 postelection manual audit. The chairmen or the chairmen's designees shall
35 randomly select from those sequestered early ballots a number equal to ~~one~~
36 TWO per cent of the total number of early ballots cast or ~~five~~ TEN thousand
37 early ballots, whichever is less. From those randomly selected early
38 ballots, the county officer in charge of elections shall conduct a manual
39 audit of the same races that are being hand counted pursuant to subsection C
40 of this section. If the manual audit of the early ballots results in a
41 difference in any race that is equal to or greater than the designated margin
42 when compared to the electronically tabulated results for those same early
43 ballots, the manual audit shall be repeated for those same early ballots. If
44 the second manual audit results in a difference in that race that is equal to

1 or greater than the designated margin when compared to the electronically
2 tabulated results for those same early ballots, the manual audit shall be
3 expanded only for that race to a number of additional early ballots equal to
4 ~~one per cent of the total early ballots cast or an additional five thousand~~
5 ~~ballots, whichever is less~~ OR GREATER THAN THE NUMBER USED IN THE FIRST HAND
6 COUNT, to be randomly selected from the batch or batches of sequestered early
7 ballots. THE EXPANDED AUDIT SHALL INCLUDE THE BALLOTS USED IN THE ORIGINAL
8 HAND COUNT TOGETHER WITH THE ADDITIONAL BALLOTS. If the expanded early
9 ballot manual audit results in a difference for that race that is equal to or
10 greater than the designated margin, ~~when compared to any of the earlier~~
11 ~~manual counts for that race, the manual counts shall be repeated for that~~
12 ~~race until a manual count results in a difference in that race that is less~~
13 ~~than the designated margin. If at any point in the manual audit of early~~
14 ~~ballots the difference between any manual count of early ballots is less than~~
15 ~~the designated margin when compared to the electronic tabulation of those~~
16 ~~ballots, the electronic tabulation shall be included in the canvass and no~~
17 ~~further manual audit of the early ballots shall be conducted~~ THE FINAL HAND
18 COUNT SHALL BE EXTENDED TO INCLUDE THE ENTIRE JURISDICTION FOR THAT RACE. IF
19 THE JURISDICTIONAL BOUNDARY FOR THAT RACE WOULD INCLUDE ANY PORTION OF MORE
20 THAN ONE COUNTY, THE FINAL HAND COUNT SHALL NOT BE EXTENDED INTO THE
21 PRECINCTS OF THAT RACE THAT ARE OUTSIDE OF THE COUNTY THAT IS CONDUCTING THE
22 EXPANDED HAND COUNT. IF THE EXPANDED HAND COUNT RESULTS IN A DIFFERENCE IN
23 THAT RACE THAT IS LESS THAN THE DESIGNATED MARGIN WHEN COMPARED TO THE
24 ELECTRONIC TABULATION OF THOSE SAME BALLOTS, THE ELECTRONIC TABULATION
25 CONSTITUTES THE OFFICIAL COUNT FOR THAT RACE.

26 H. During any hand count of early ballots, the county officer in
27 charge of elections and election board workers shall attempt to determine the
28 intent of the voter in casting the ballot.

29 I. Notwithstanding any other law, the county officer in charge of
30 elections shall retain custody of the ballots for purposes of performing any
31 required hand counts and the officer shall provide for security for those
32 ballots.

33 J. The hand counts prescribed by this section shall begin within
34 twenty-four hours after the closing of the polls and shall be completed
35 before the canvassing of the election for that county. The results of those
36 hand counts shall be provided to the secretary of state, who shall make those
37 results publicly available on the secretary of state's web site.

38 K. For any county in which a hand count has been expanded to all
39 precincts in the jurisdiction, the secretary of state shall make available
40 the escrowed source code for that county to the superior court. The superior
41 court shall appoint a special master to review the computer software. The
42 special master shall have expertise in software engineering and shall not be
43 affiliated with an election software vendor nor with a candidate and shall
44 sign and be bound by a nondisclosure agreement regarding the source code

1 itself, and shall issue a public report to the court and to the secretary of
2 state regarding the special master's findings on the reasons for the
3 discrepancies. The secretary of state shall consider the reports for
4 purposes of reviewing the certification of that equipment and software for
5 use in this state.

6 L. The vote count verification committee is established in the office
7 of the secretary of state and all of the following apply:

8 1. At least thirty days before the 2006 primary election, the
9 secretary of state shall appoint seven persons to the committee, no more than
10 three of whom are members of the same political party.

11 2. Members of the committee shall have expertise in any two or more of
12 the areas of advanced mathematics, statistics, random selection methods,
13 systems operations or voting systems.

14 3. A person is not eligible to be a committee member if that person
15 has been affiliated with or received any income in the preceding five years
16 from any person or entity that provides election equipment or services in
17 this state.

18 4. The vote count verification committee shall meet and establish one
19 or more designated margins to be used in reviewing the hand counting of votes
20 as required pursuant to this section. The committee shall review and
21 consider revising the designated margins every two years for use in the
22 applicable elections. The committee shall provide the designated margins to
23 the secretary of state at least ten days before the primary election and at
24 least ten days before the general election, and the secretary of state shall
25 make that information publicly available on the secretary of state's web
26 site.

27 5. Members of the vote count verification committee are not eligible
28 to receive compensation but are eligible for reimbursement of expenses
29 pursuant to title 38, chapter 4, article 2. The committee is a public body
30 and its meetings are subject to title 38, chapter 3, article 3.1 and its
31 reports and records are subject to title 39, chapter 1.

32 Sec. 3. Section 16-663, Arizona Revised Statutes, is amended to read:

33 16-663. Recount of votes; method

34 A. The superior court to which the facts requiring a recount are
35 certified shall forthwith make and enter an order requiring a recount of the
36 votes cast for such office, measure or proposal. The recount shall be
37 conducted in accordance with the laws pertaining to contests of elections.

38 B. When the court orders a recount of votes which were cast and
39 tabulated on electronic voting equipment, such recount shall be pursuant to
40 section 16-664. On completion of the recount, and for legislative, statewide
41 and federal candidate races only, the county chairmen of the political
42 parties entitled to continued representation on the ballot or the chairman's
43 designee shall select at random without the use of a computer five per cent
44 of the precincts for the recounted race for a hand count. ~~and~~ EARLY BALLOTS

1 FOR THE RECOUNTED RACE SHALL BE INCLUDED IN EACH SELECTED PRECINCT HAND
2 COUNT. THE TOTALS FOR EARLY BALLOTS AND PRECINCT BALLOTS SHALL BE OBTAINED
3 SEPARATELY BUT SHALL BE COMBINED WHEN CALCULATING THE FINAL DIFFERENCE
4 BETWEEN THE ELECTRONIC TABULATION AND THE HAND COUNT FOR EACH PRECINCT. If
5 the results of that hand count when compared to the electronic tabulation of
6 that same race are less than the designated margins calculated pursuant to
7 section 16-602, the recount is complete and the electronic tabulation is the
8 official result. If the hand count results in a difference that is equal to
9 or greater than the designated margin for that race, the procedure
10 established in section 16-602, subsections D, E, F and G applies.